FEB - 4 1993

## BEFORE THE FEDERAL COMMUNICATIONS COMMISSION WASHINGTON, D.C. 20554

FEDERAL COMMUNICATIONS COMMISSION OFFICE OF THE SECRETARY

| IN  | THE | MA   | TTER | OF.          |
|-----|-----|------|------|--------------|
| 11. |     | 1417 |      | <b>\</b> /1. |

| REPLACEMENT OF PART 90 BY          | ) |                      |
|------------------------------------|---|----------------------|
| PART 88 TO REVISE THE PRIVATE      | ) | PR DOCKET NO./92-235 |
| LAND MOBILE RADIO SERVICES AND     | ) |                      |
| MODIFY THE POLICIES GOVERNING THEM | ) |                      |

TO: Chief, Private Radio Bureau

## REQUEST FOR EXTENSION OF TIME

PowerSpectrum, Inc. ("PSI"), pursuant to the provisions of Section 1.46 of the Rules and Regulations of the Federal Communications Commission ("FCC" or "Commission"), by its attorneys, hereby requests an extension of time for the submission of Comments and Reply Comments in the above-referenced proceeding. PSI asks that the Commission provide at least an additional 90 days for the submission of Comments and a period of 60 days after that for the submission of Reply Comments.

The Notice of Proposed Rulemaking ("Notice") in this proceeding contains a comprehensive set of proposals intended to increase channel capacity in the bands below 512 MHz. The proposals are designed to promote more efficient use of the channels and to simplify the policies governing their use.<sup>2</sup>/ The changes proposed are fundamental to the private land mobile radio services ("PLMRS"). Critically, they would

No. of Copies rec'd D

Notice of Proposed Rulemaking ("Notice"), PR Docket No. 92-235 (FCC 92-469), released November 6, 1992.

<sup>2/ &</sup>lt;u>Notice</u>, at ¶ 1.

affect the technology that could be employed in the bands below 512 MHz and, in PSI's view, potentially limit the use of new spectrum efficient technologies.

As the Commission is aware, PSI is a subsidiary of Geotek Industries, Inc. ("Geotek"), a U.S. public company. PSI was created specifically to exploit the potential use of frequency hopping multiple access ("FHMA") technology. PSI has asked for relief from certain Commission rules to implement its technology in the 900 MHz spectrum allocated for specialized mobile radio ("SMR") services. FMHA technology was originally developed by RAFAEL, the Israeli Armament Research and Development Agency. PSI has the right to the commercial utilization of FHMA technology in the U.S. and worldwide. FHMA technology is described more fully in PSI's Rule Waiver Request. FHMA technology is described more fully in PSI's Rule Waiver

By way of summary, FHMA is a digital technology which utilizes spectrum through the use of a number of predesignated channels. Transmissions are digitized and timeslotted in a manner similar to conventional time division multiple access ("TDMA") with substantial additional error correction coding. The radio transmitter hops between the designated frequencies, as many as 250 times per second, and every burst of information is transmitted on a different frequency from the preceding burst. At the receiver side, the same hopping sequence is employed and the stream of data bursts is reconfigured. FHMA technology promises significant increases in efficiency over not

PowerSpectrum, Inc., Rule Waiver Request, submitted October 9, 1992. ("PSI Rule Waiver Request").

<sup>&</sup>lt;sup>4</sup>/ PSI Rule Wavier Request, at pp. 8-13.

only today's analog systems but over the TDMA techniques proposed, for example, by current SMR licensees. PSI projects that FHMA technology will produce a gain in capacity of more than 30 times greater than analog or 5 times over TDMA.

FHMA technology can be used successfully in the bands below 512 MHz and may be of particularly beneficial use in the PLMRS. The FHMA signals can hop among non contiguous channels. Accordingly, it may create more efficient use of the spectrum without the need to rechannelize the bands. PSI, therefore, has a significant interest in this proceeding and is studying the Commission's proposal, with particular emphasis on the proposed channelization schemes for the bands below 512 MHz. PSI is concerned that the envisioned method of licensing channels will impede the potential use of FHMA technology, thereby preventing the public from recognizing the significant spectrum efficiency that will result from the use of the technology in those bands.

Because of the potential affect that the proposed rules may have on the ability to use FHMA technology, PSI hereby asks for an additional 90 days to complete its study of this issue. The additional time requested herein will not negatively affect any of the other parties to the proceeding. The public will ultimately benefit if the proposed rules accommodate the most spectrum efficient technologies available. It is, therefore, in the public interest for companies like PSI to have sufficient time to ensure that the proposed rules will promote the most intense use of the spectrum. Because this proceeding is designed to ensure the long-term effectiveness of the rules governing the PLMRS, an additional 90-day period to study the proposal is only a de minimis delay and will potentially produce great public benefits.

WHEREFORE, THE PREMISES CONSIDERED, PowerSpectrum, Inc. hereby asks that the Federal Communication Commission extend until May 26, 1993 the deadline for the submission of Comments in this proceeding and that it extend the deadline for the submission of Reply Comments until July 26, 1993.

Respectfully submitted,

POWERSPECTRUM, INC.

By:

Russell H. Fox

**GARDNER, CARTON & DOUGLAS** 

1301 K Street, N.W.

Suite 900, East Tower

Washington, D.C. 20005

(202) 408-7100

Its Attorneys

Dated:

February 4, 1993

F:\RHF\PLD\46755.1